



Arlington, MA

# Economic Analysis Of Industrial Zoning Districts

Existing Conditions  
Market Analysis  
Fiscal Impact Study

December 4, 2019

**RKG**

# Agenda

Introductions

Timeline & Deliverables

Previous Plans

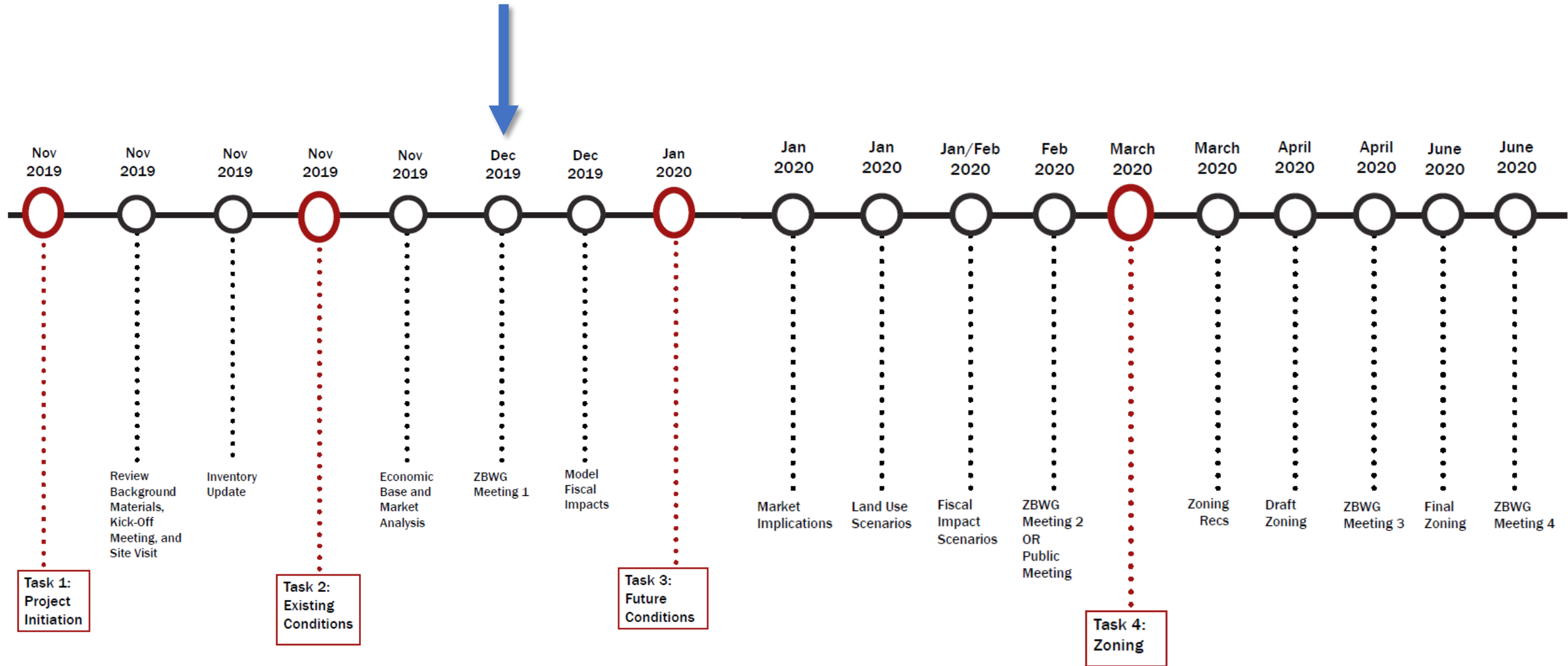
Existing Conditions & Market Analysis

Fiscal Impact Study

Next Steps



# Project Schedule







# Previous Plans





## master plan

YOUR TOWN, YOUR FUTURE

Adopted February 4, 2015  
Arlington Redevelopment Board

### Issues & Opportunities:

- Projected private sector job growth of 300-900 new jobs by 2020. Translates into demand of 160,000 square feet of space over ten years.
- Potential for retail but needs to be strategic.
- Potential for co-working space and creative arts space.
- Redevelopment should include a mix of residential and non-residential uses.

### Recommendations:

- Promote mixed-use in Business Districts.
- Update Industrial District Uses and Dimensional Standards:
  - Remove minimum floor area requirements for smaller businesses
  - Allow restaurants
  - Allow small retail space
  - Allow residential as part of mixed use by Special Permit
- Allow collaborative workspaces.
- Identify suitable locations for office buildings and/or innovation park.



# Arlington Arts & Culture Plan (2017)

Proposed cultural district at Mystic Ave. & Mill St. abuts some industrial zone parcels

June 2017's PATHWAYS temporary art installation could be expanded from Minuteman Bikeway into some industrial areas





# Mill Brook Corridor Plan (2019)



Mill Brook passes under a portion of the DPW yard, and is channelized into culverts in other industrial areas, leading to some flooding issues

Stormwater management options have added benefits for addressing ecological challenges, heat island impacts, and aesthetics – especially in industrial areas with mostly impervious surfaces



# Arlington Heights Neighborhood Action Plan (2019)

Recommended rezoning Gold's Gym site  
from Industrial to PUD as a separate  
Arlington Heights District

Recommended keeping the Arlington  
Lumber Company site and other sites  
within the district zoned as Industrial

Recommended an Environmental Design  
Review and changes to the Design  
Standards



An aerial photograph of Arlington, Massachusetts, showing industrial zones. The image features a large white industrial building with a solar panel array on its roof, surrounded by parking lots filled with cars. In the background, the dense urban landscape of Boston is visible, including the city skyline. A semi-transparent grey overlay covers the right side of the image, containing the title text.

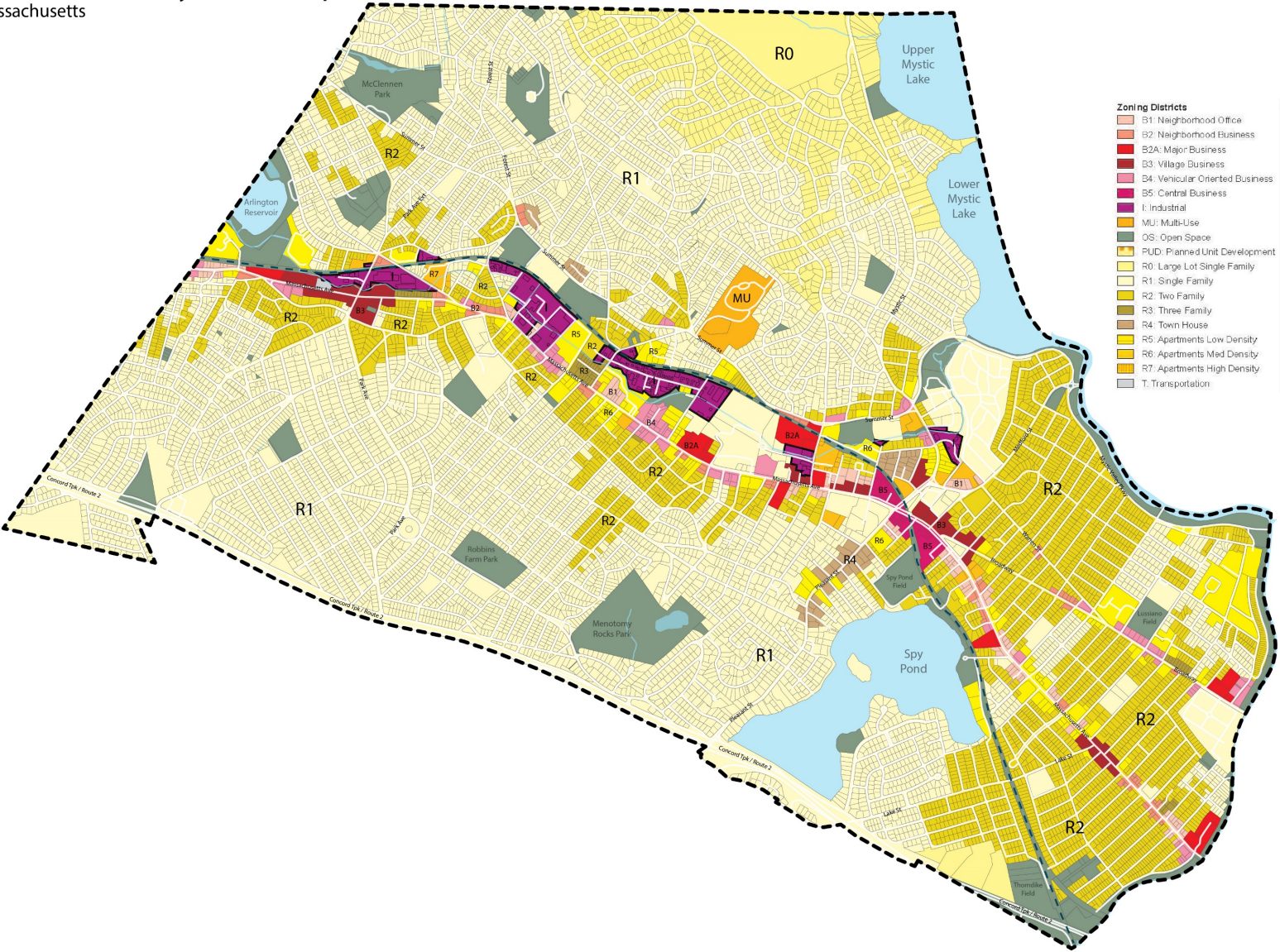
# Arlington's Industrial Zones



# Arlington's Existing Zoning Districts

## Industrial District Study - Base Map

Arlington, Massachusetts









# Arlington's Industrial Districts – Park Avenue Area

ACREAGE: 8.35

BUILDING SQFT: 100,468

ASSESED VALUE:

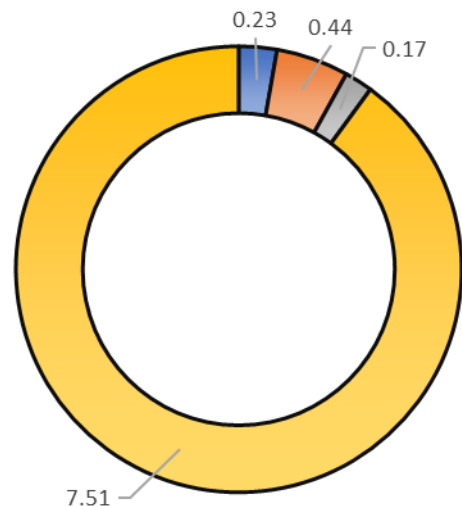
Land: \$10.77M

Building: \$3.87M

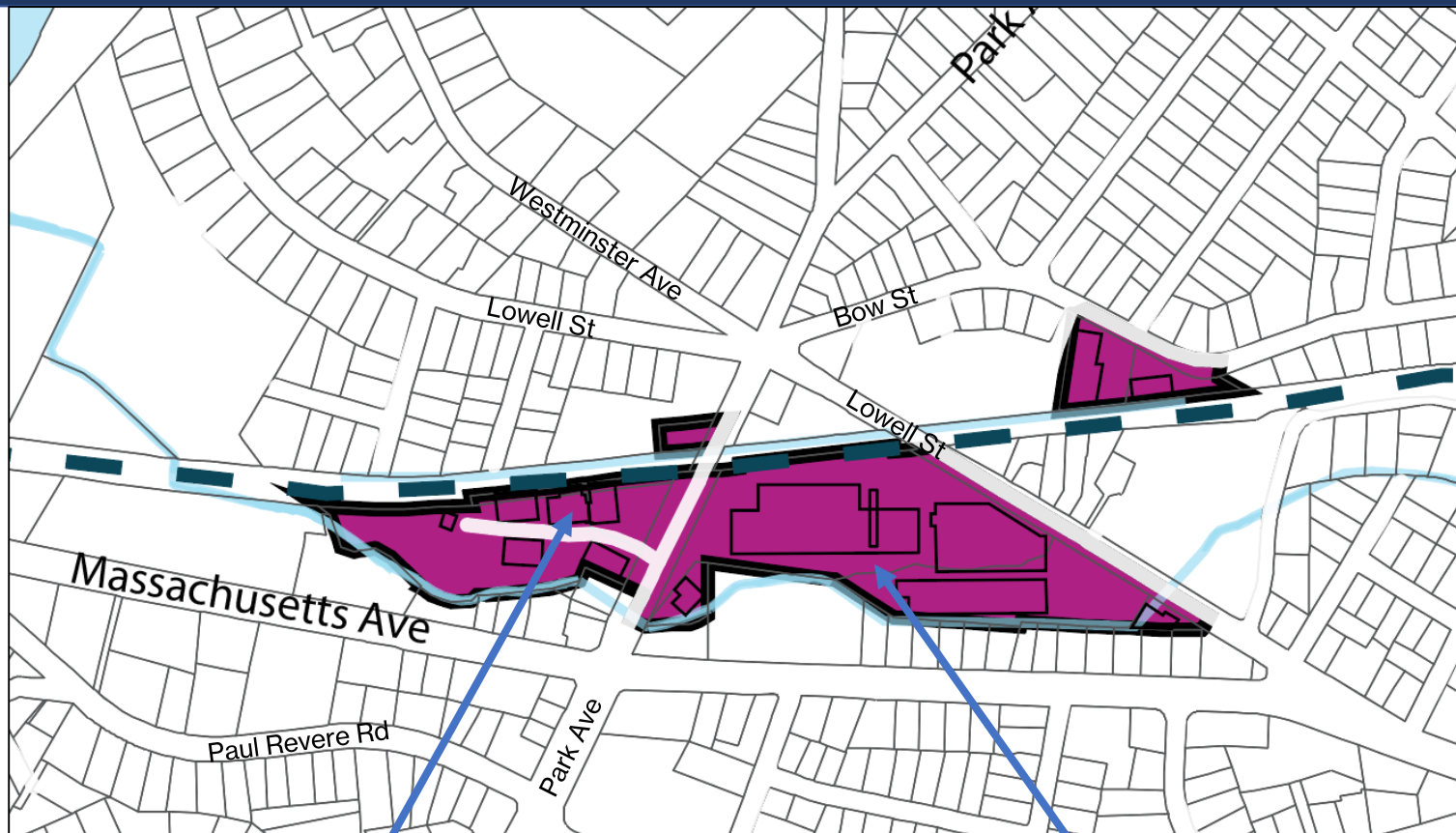
Total: \$14.82M

LAND VALUE RATIO: 0.73

LAND USE COMPOSITION (acres)



- Automotive Retail & Services
- Manufacturing & Research & Development
- Retail
- Warehouse & Distribution



Arlington Coal & Lumber



Gold's Gym, Road warrior Moving



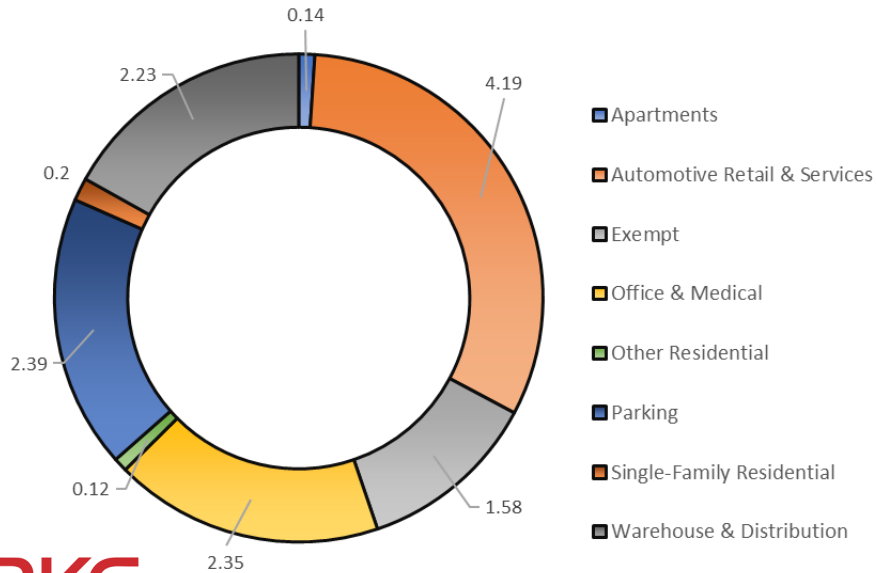


# Arlington's Industrial Districts – Forest Street Area

ACREAGE: 13.68  
BUILDING SQFT: 171,762  
ASSESED VALUE:  
Land: \$21.10M  
Building: \$7.30M  
Total: \$28.59M

LAND VALUE RATIO: 0.74

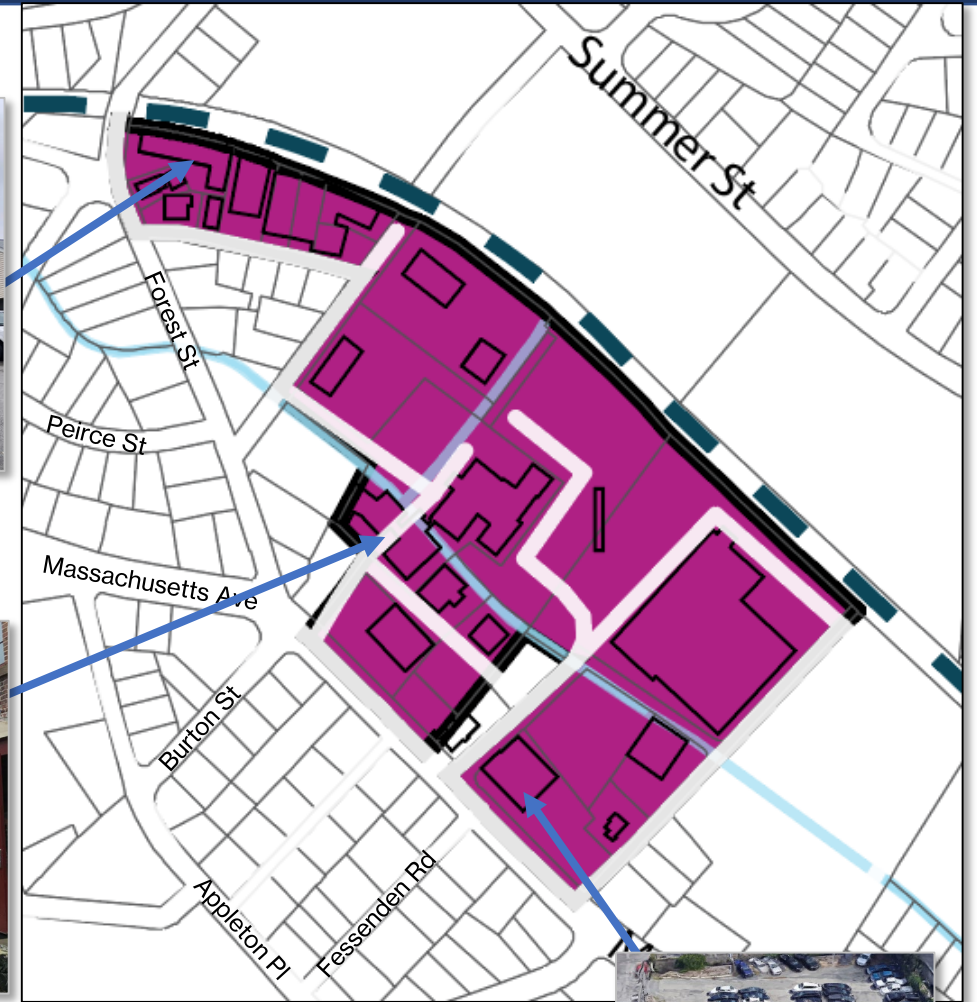
LAND USE COMPOSITION (acres)



65 Forest Street – Flex/Storage Building



Mirak Innovation Park



Mirak Chevy



# Arlington's Industrial Districts – Dudley Street Area

ACREAGE: 13.78

BUILDING SQFT: 174,159

ASSESED VALUE:

Land: \$21.52M

Building: \$12.20M

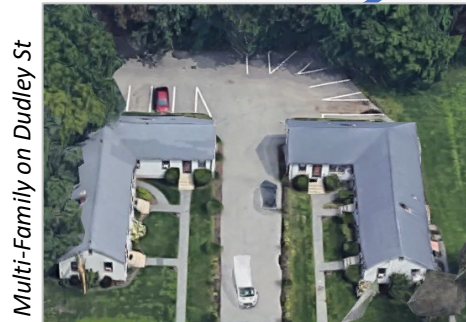
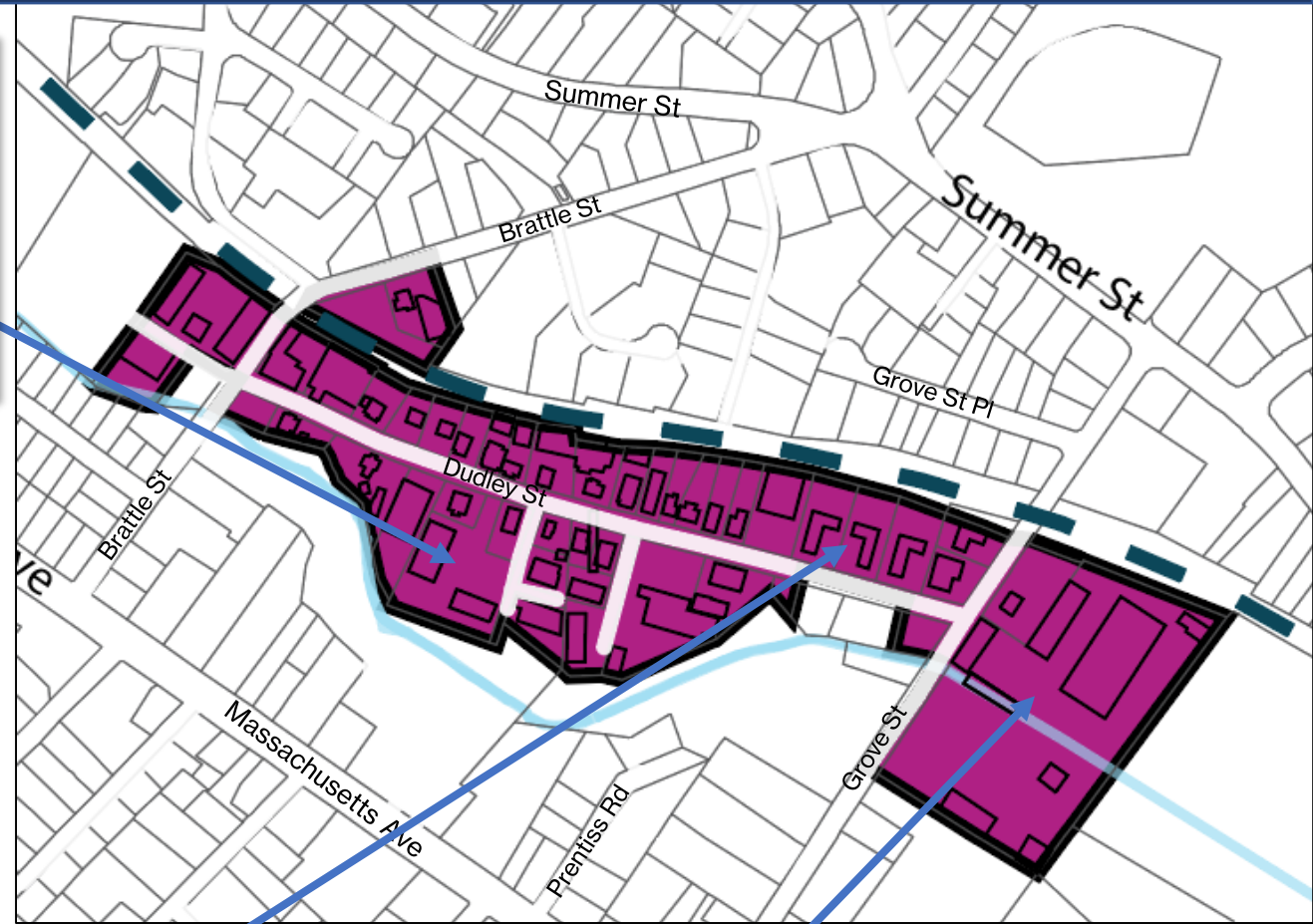
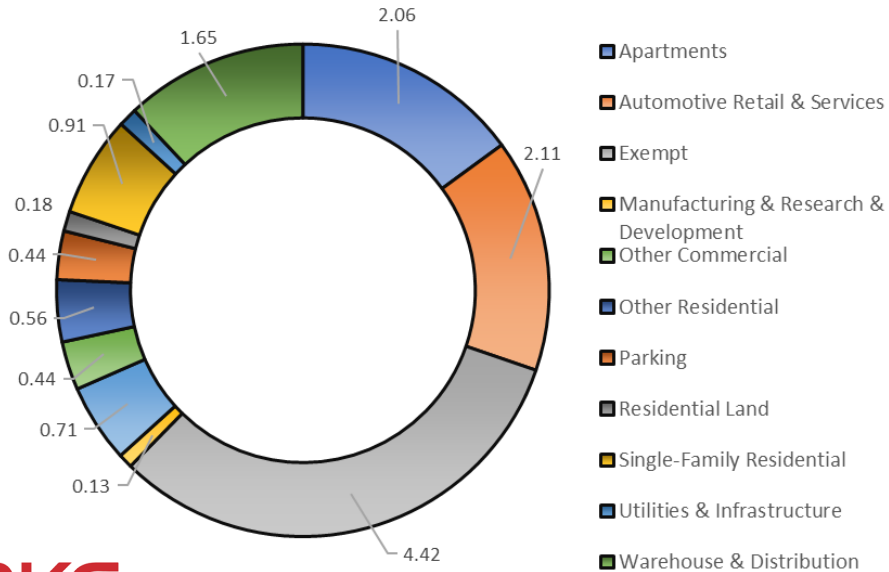
Total: \$33.78M



Dudley Automotive

LAND VALUE RATIO: 0.64

LAND USE COMPOSITION (acres)



Multi-Family on Dudley St



Arlington DPW



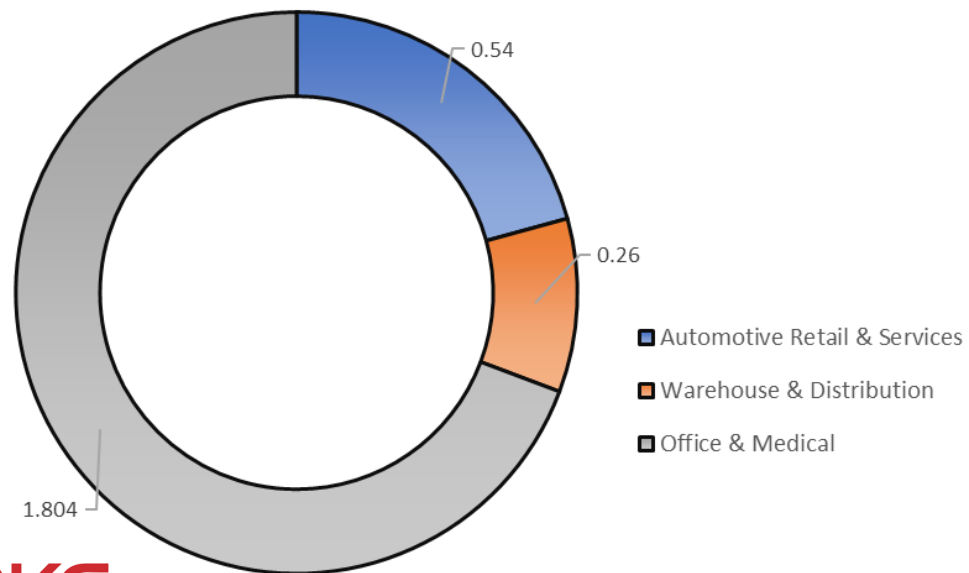
# Arlington's Industrial Districts – Mill Street Area

ACREAGE: 2.60  
BUILDING SQFT: 89,903  
ASSESED VALUE:  
Land: \$1.55M  
Building: \$15.37M  
Total: \$16.89M

LAND VALUE RATIO: 0.09

*\*22 Mill Street does not have a land value because it is a commercial condo building*

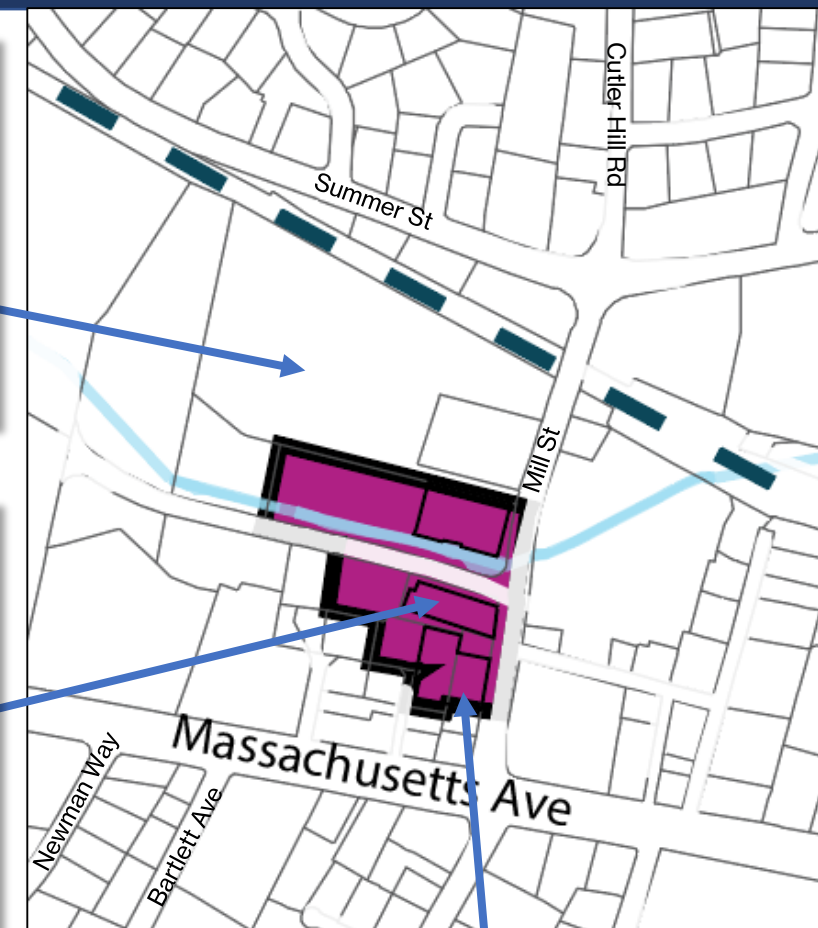
LAND USE COMPOSITION (acres)



Brigham Square Apartments



Mill Street Professional Building



The Mill - Highrock Church



# Arlington's Industrial Districts – Mystic Street Area

ACREAGE: 2.74

BUILDING SQFT: 41,952

ASSESED VALUE:

Land:

\$4.37M

Building:

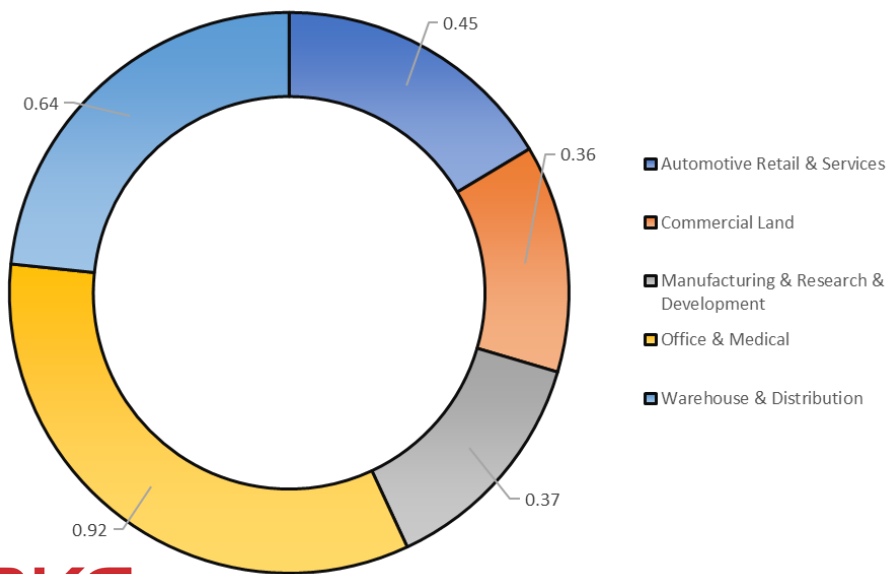
\$3.04M

Total:

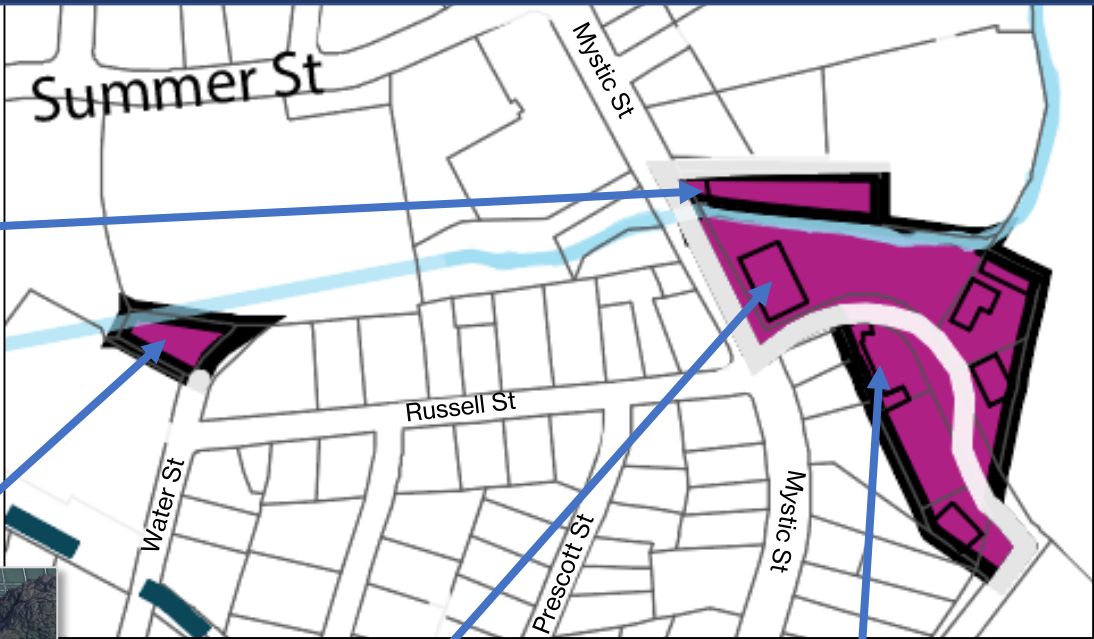
\$7.52M

LAND VALUE RATIO: 0.58

LAND USE COMPOSITION (acres)



TetraGenetics and minipcr



Plumber's Supply Company




Armstrong Ambulance



2 Garden St – New Office/Industrial Space



An aerial photograph of an industrial and residential area. In the foreground, there are several large industrial buildings, including a prominent white building with a corrugated metal roof and a large parking lot filled with cars. To the right, there are more industrial structures and a large, open lot. In the background, a dense residential area with many houses and trees is visible, and further back, a city skyline with tall buildings can be seen under a clear blue sky. A semi-transparent white diagonal shape is overlaid on the right side of the image, containing the title text.

# Existing Conditions & Market Study



## Rising population of Arlington & Middlesex County

### Total Population Growth, 2012-2017

	2012	2017	% Growth
Arlington	42,950	44,990	+ 4.7%
Middlesex County	1,508,000	1,583,000	+ 5.0%
Massachusetts	6,561,000	6,789,000	+ 3.5%

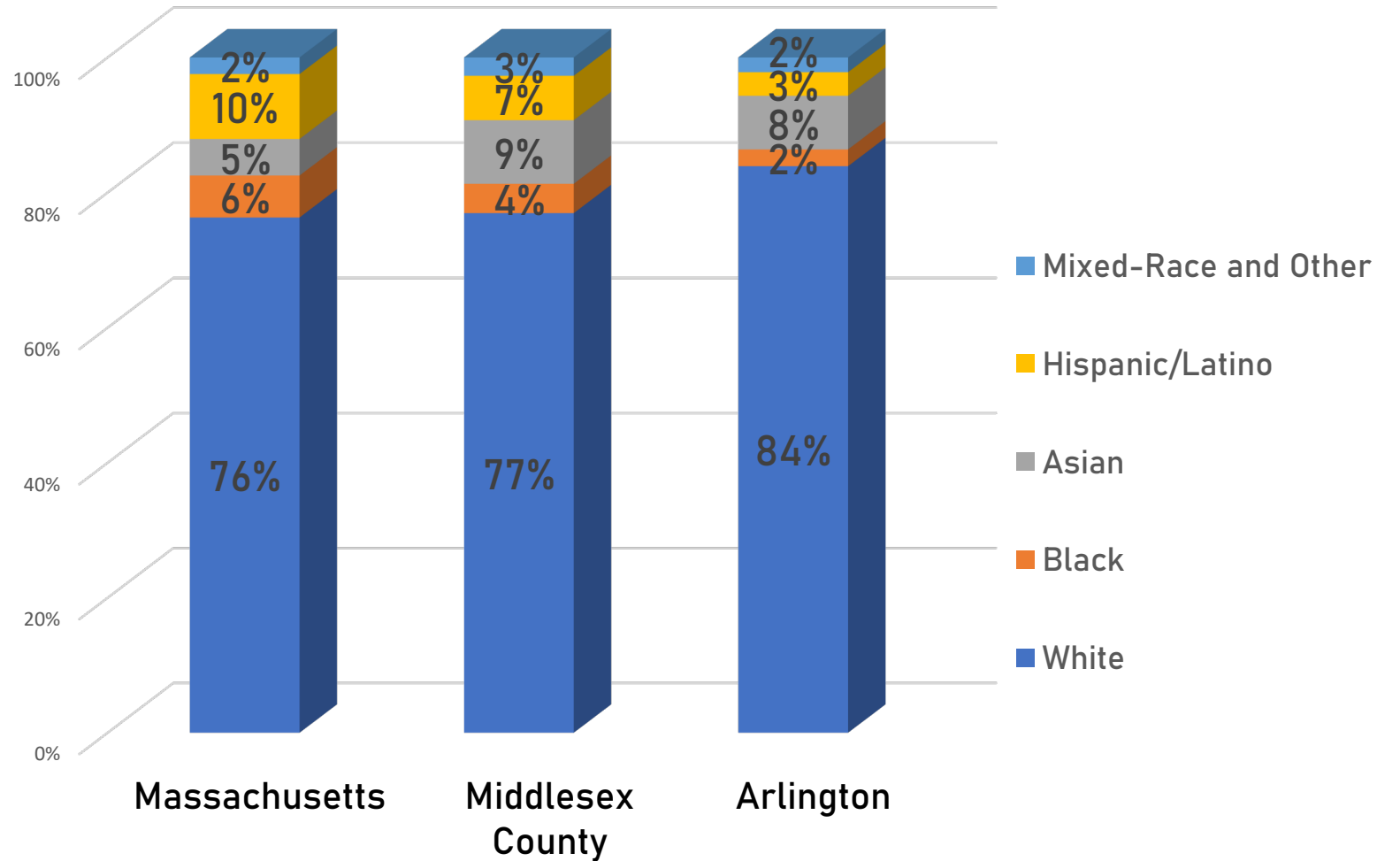
*Sources: US Census Bureau; ESRI Population Tables; RKG Associates.*



Rising population of Arlington  
& Middlesex County

Increasing diversity of  
residents

## Population by Race/Ethnicity, 2017





Rising population of Arlington  
& Middlesex County

Increasing diversity of  
residents

## Population Growth by Race/Ethnicity, 2012-2017

	2012	2017	% Growth
Arlington	42,950	44,990	+ 4.7%
White	36,040	35,280	(2.1%)
Black	1,070	840	(21.4%)
Asian	3,410	5,180	+ 52.0%
Hispanic or Latino	1,500	1,940	+ 29.5%
Mixed-Race & All Other	940	1,760	+ 86.9%

*Sources: US Census Bureau, Census 2010 & ACS 2013-2017 5-year Estimates; RKG Associates.*

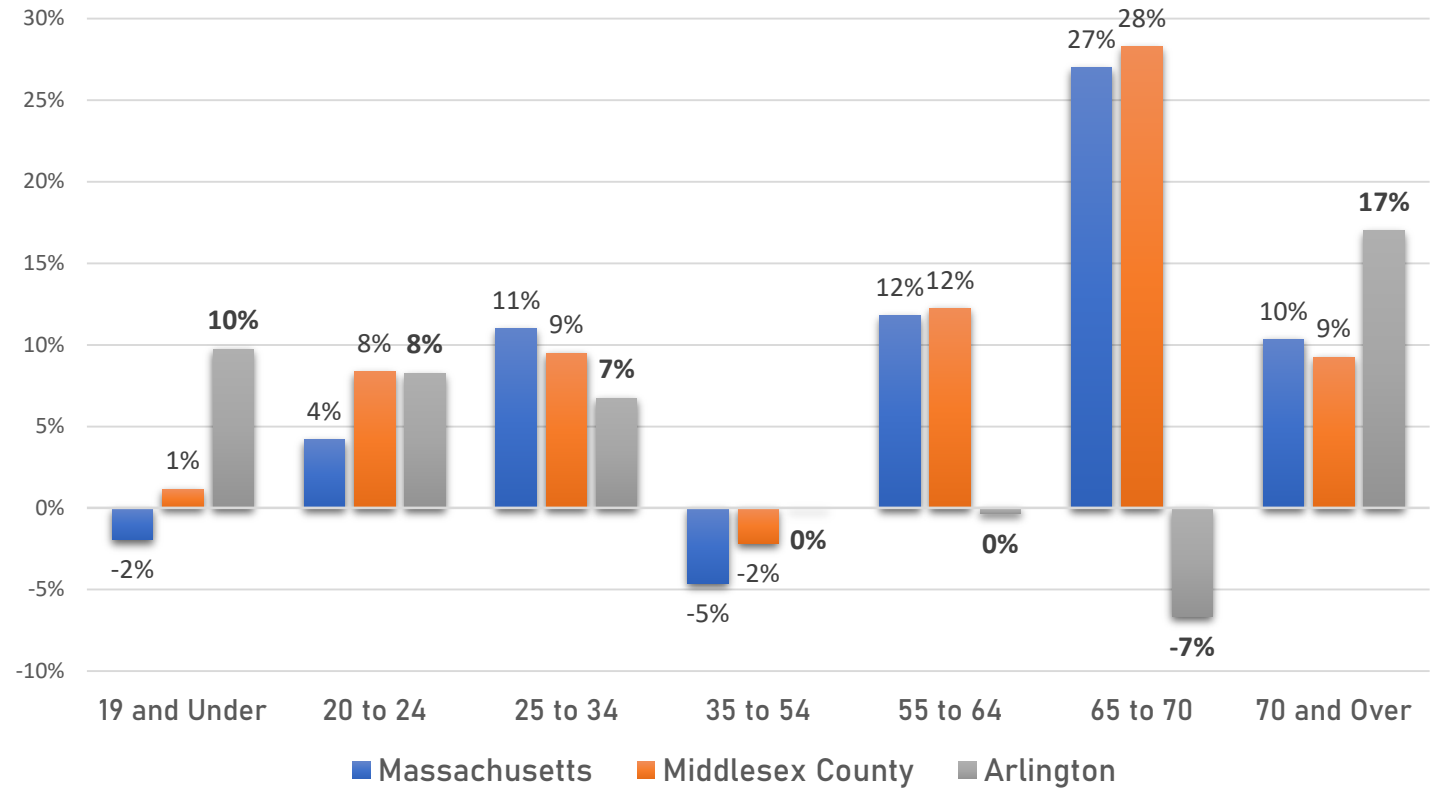


Rising population of Arlington  
& Middlesex County

Increasing diversity of  
residents

Aging more quickly than some  
neighboring communities

## Population Growth by Age Cohort, 2012-2017



Rising population of Arlington  
& Middlesex County

Increasing diversity of  
residents

Aging more quickly than some  
neighboring communities

Average household is getting  
larger

## Average Household Size

2012

Massachusetts  
2.60

Middlesex Cty  
2.60

Arlington  
2.25

2017

Massachusetts  
2.63

Middlesex Cty  
2.67

Arlington  
2.41



## Average Household Size

Rising population of Arlington  
& Middlesex County

Increasing diversity of  
residents

Aging more quickly than some  
neighboring communities

Average household is getting  
larger

2017

Massachusetts  
2.63

Middlesex Cty  
2.67

Arlington  
2.41

## Growth in Households by Type, 2012-2017

	2012	2017	Growth
Arlington Total	19,090	18,630	(440)
<u>Family Households</u>	<u>10,890</u>	<u>11,490</u>	<u>600</u>
Married-couple Families	8,850	9,620	770
Other Family Households	2,040	1,870	(170)
<u>Non-Family Households</u>	<u>8,190</u>	<u>7,150</u>	<u>(1,040)</u>
1-person Households	6,680	5,680	(1,000)
Non-family Roommates	1,520	1,470	(40)

Sources: US Census Bureau, Census 2010 & ACS 2013-2017 5-year Estimates; RKG Associates.

Rising population of Arlington  
& Middlesex County

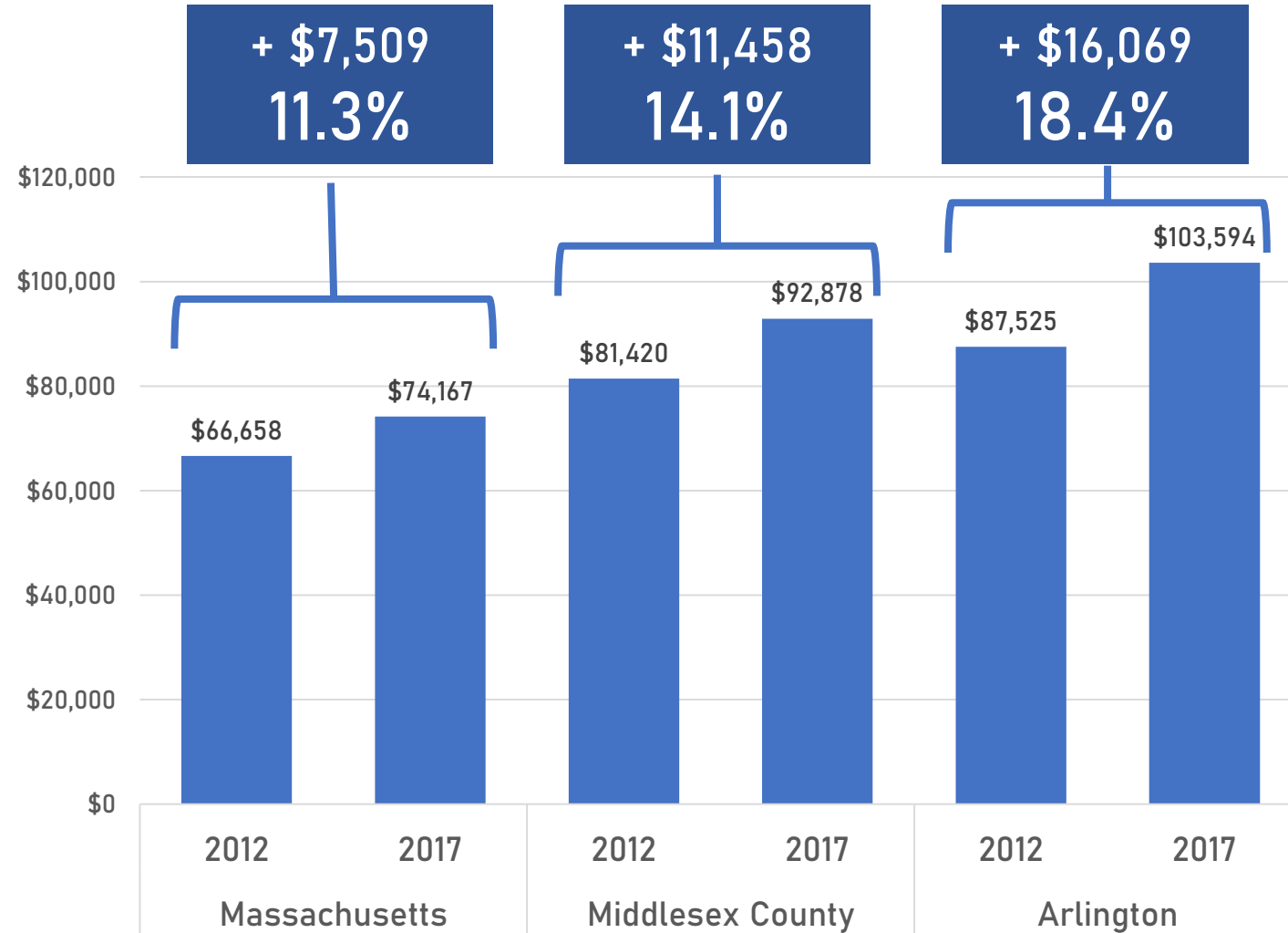
Increasing diversity of  
residents

Aging more quickly than some  
neighboring communities

Average household is getting  
larger

Strong growth in median  
household incomes

## Median Household Incomes, 2012 & 2017







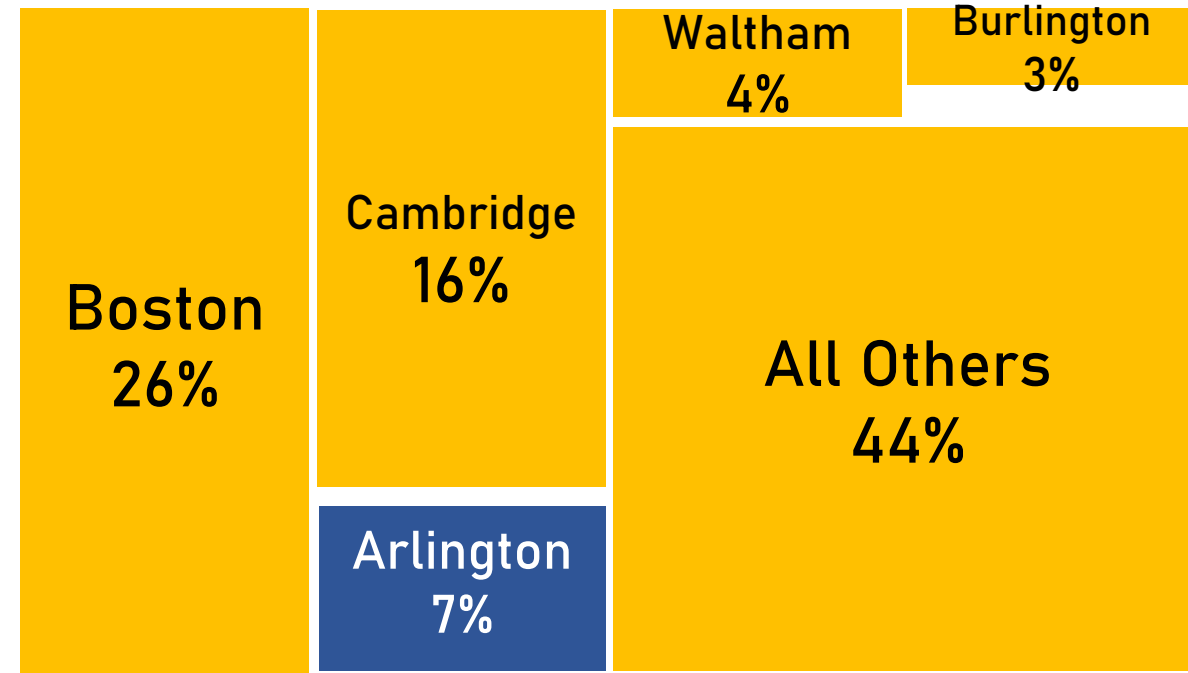
45,000 residents



11,350 jobs

24,300 working residents

**93%**  
of Arlington's  
working residents  
commute out of  
town.



## Arlington's Largest Employment Sectors, 2018

	2010	2018	Job Growth
Arlington Total	9,954	11,354	1,400
Restaurants	839	1,071	233
Public Education and Healthcare	819	910	91
Local Government	556	598	42
Grocery Stores	441	494	53
Residential Care Facilities	178	446	268

Sources: Massachusetts Executive Office of Labor & Workforce Development; EMSI Industry Tables; RKG Associates.





## Selected Sectors with Jobs in Industrial Zones, 2018

	2010	2018	Job Growth	Average Annual Wage
Ambulatory Healthcare Services	397	395	(2)	\$48,749
Building Equipment Contractors	164	225	62	\$76,256
Automobile Dealers	186	216	30	\$68,658
Home Services	184	202	19	\$40,461
Computer Systems Design	137	171	34	\$149,725
Residential Construction	136	166	30	\$56,551

Sources: Massachusetts Executive Office of Labor & Workforce Development; EMSI Industry Tables; RKG Associates.



# Who's hiring?

## Most Arlington Job Postings, 2019\*

	Unique Postings	Median Posting Duration
Arlington Total	4,035	26 days
Uber Technologies	136	16 days
Quest Diagnostics	124	37 days
Whole Foods Market	80	32 days
Arlington Public Schools	71	56 days
Shipt	62	8 days
Sunrise Senior Living	59	60 days
CVS Health	49	80 days

*\*February 2018 through February 2019. Excludes externally-based recruiting firms.  
Sources: EMSI Job Posting Analytics; RKG Associates.*





# Who's hiring?

## Most Arlington Job Postings by Occupation, 2019\*

	Unique Postings	Median Posting Duration
Arlington Total	4,035	26 days
Childcare Workers	311	25 days
Heavy and Tractor-Trailer Truck Drivers	300	34 days
Passenger Car Drivers	157	14 days
Light Truck or Delivery Service Drivers	102	13 days
Registered Nurses	95	19 days
Customer Service Representatives	92	22 days
Personal Care Aides	72	23 days

*\*February 2018 through February 2019. Excludes externally-based recruiting firms.  
Sources: EMSI Job Posting Analytics; RKG Associates.*







# How are Arlington's Industrial Zones Competing?



# How are Arlington's Industrial Zones Competing?

"Cost is a huge issue. If we hadn't bought here when we did, we'd be pushed out beyond I-495."

"Locating right next to residents presents a lot of challenges, especially for more traditional industrial companies."

"I moved my business here because I live here... I walk to work in ten minutes. It's awesome."

"We had to get creative with parking. We lease spaces from other companies and sometimes use public lots overnight."

"There's a shortage of commercial real estate. If a business owner sells, they might be sending 100 workers out to work an hour from here"

# Arlington's Industrial Real Estate

Auto Repair & Supplies  
Contractor Condominiums  
Lumber Yards  
Manufacturing  
Manufacturing Offices  
Storage & Warehousing  
Distribution  
Research & Development  
Manufacturing Warehouses

**69**  
properties

**520,000**  
built square feet

**\$23.84 million**  
assessed built value

**\$71.10 million**  
assessed total value

- 24 are auto repair facilities, 22 storage/warehousing
- Average structure is 7,530 square feet (warehouses 18,700, auto supply 1,450)
- Buildings worth just \$46 per square foot
- Across just 28 acres, this equates to over \$2.5 million per acre

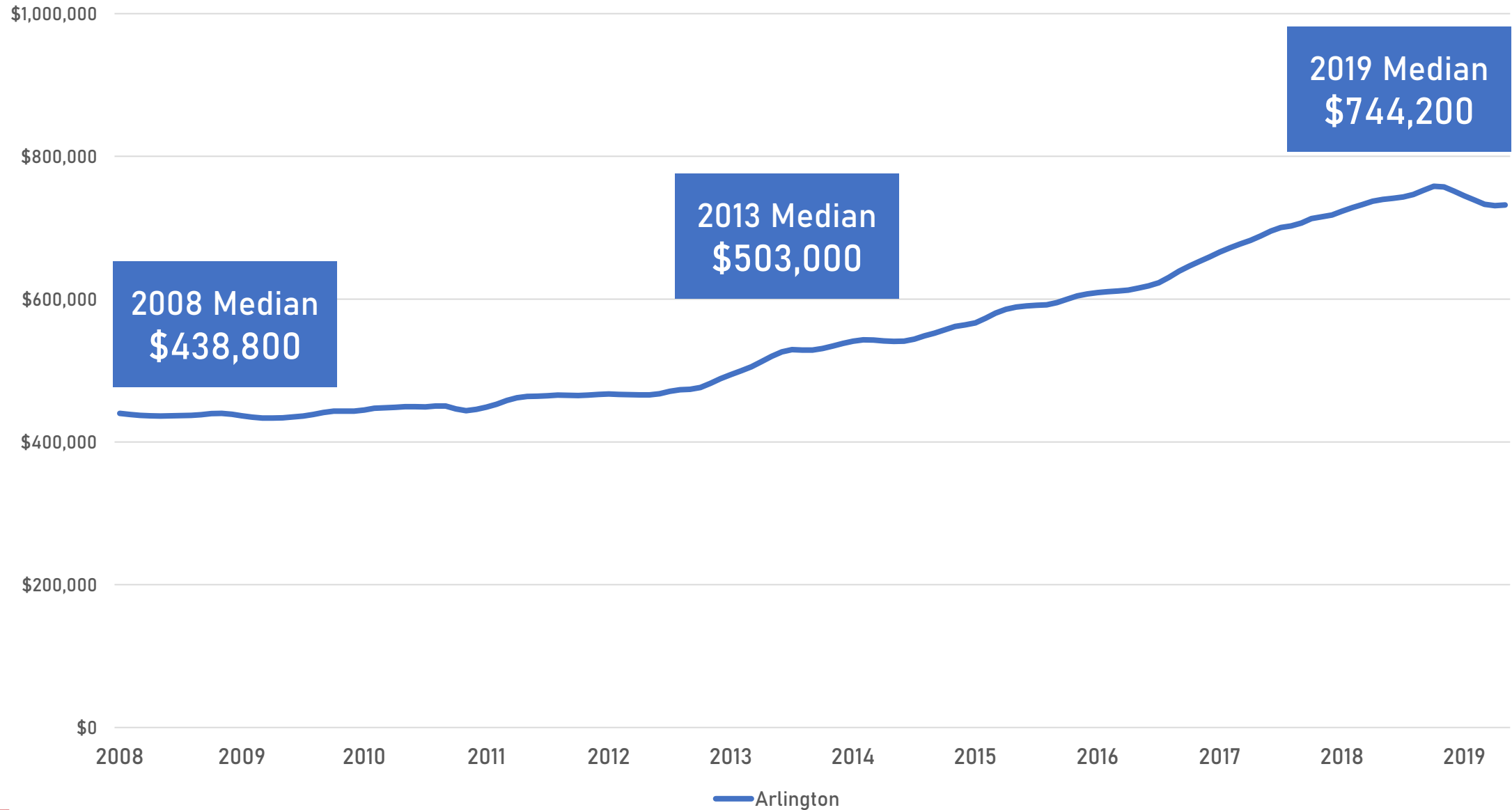


**Redevelopment Pressures**



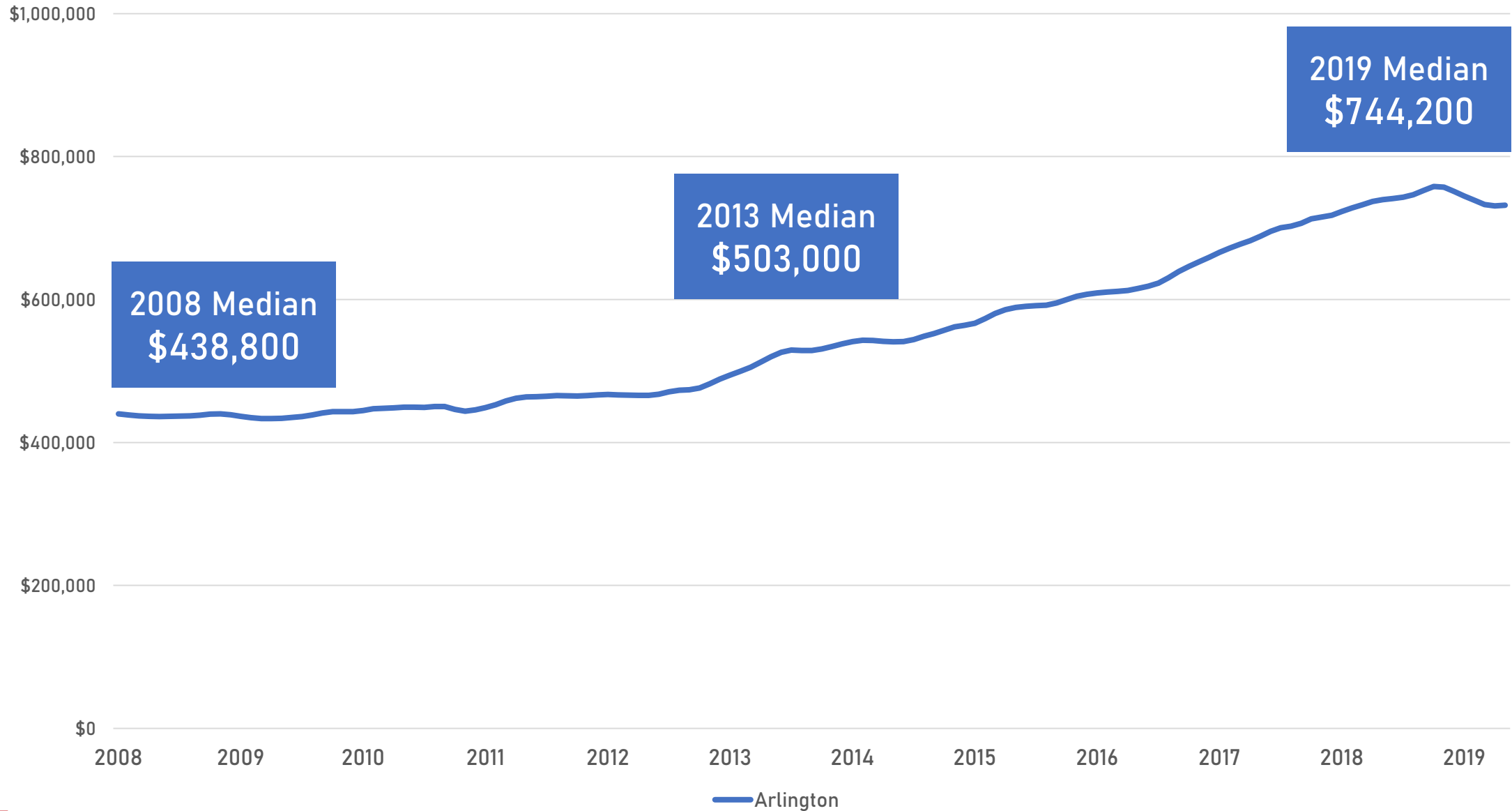


# Median Home Value Trend



Sources: Zillow Research Housing Value Index Time Series; RKG Associates.

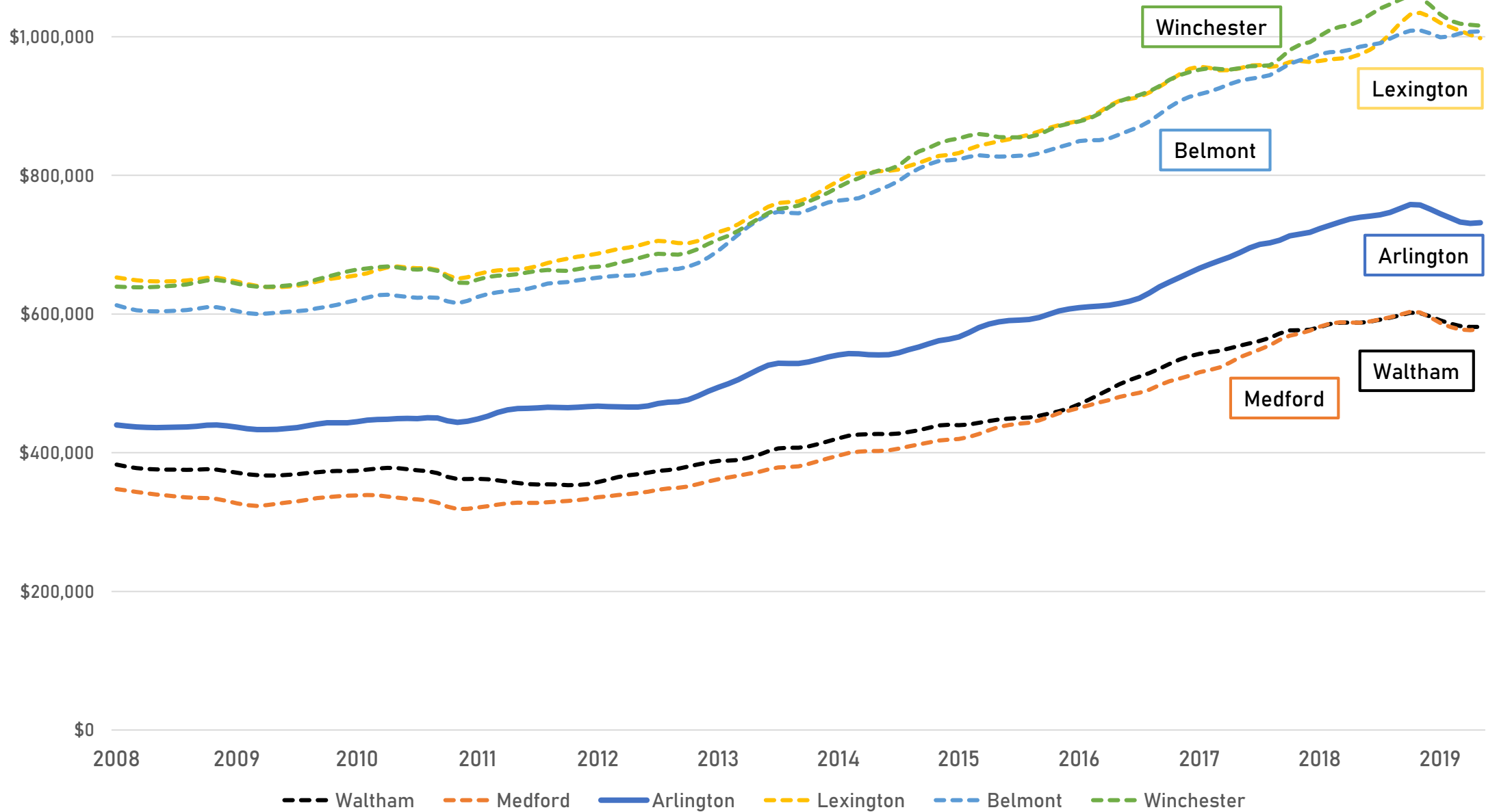
# Median Home Value Trend



Sources: Zillow Research Housing Value Index Time Series; RKG Associates.

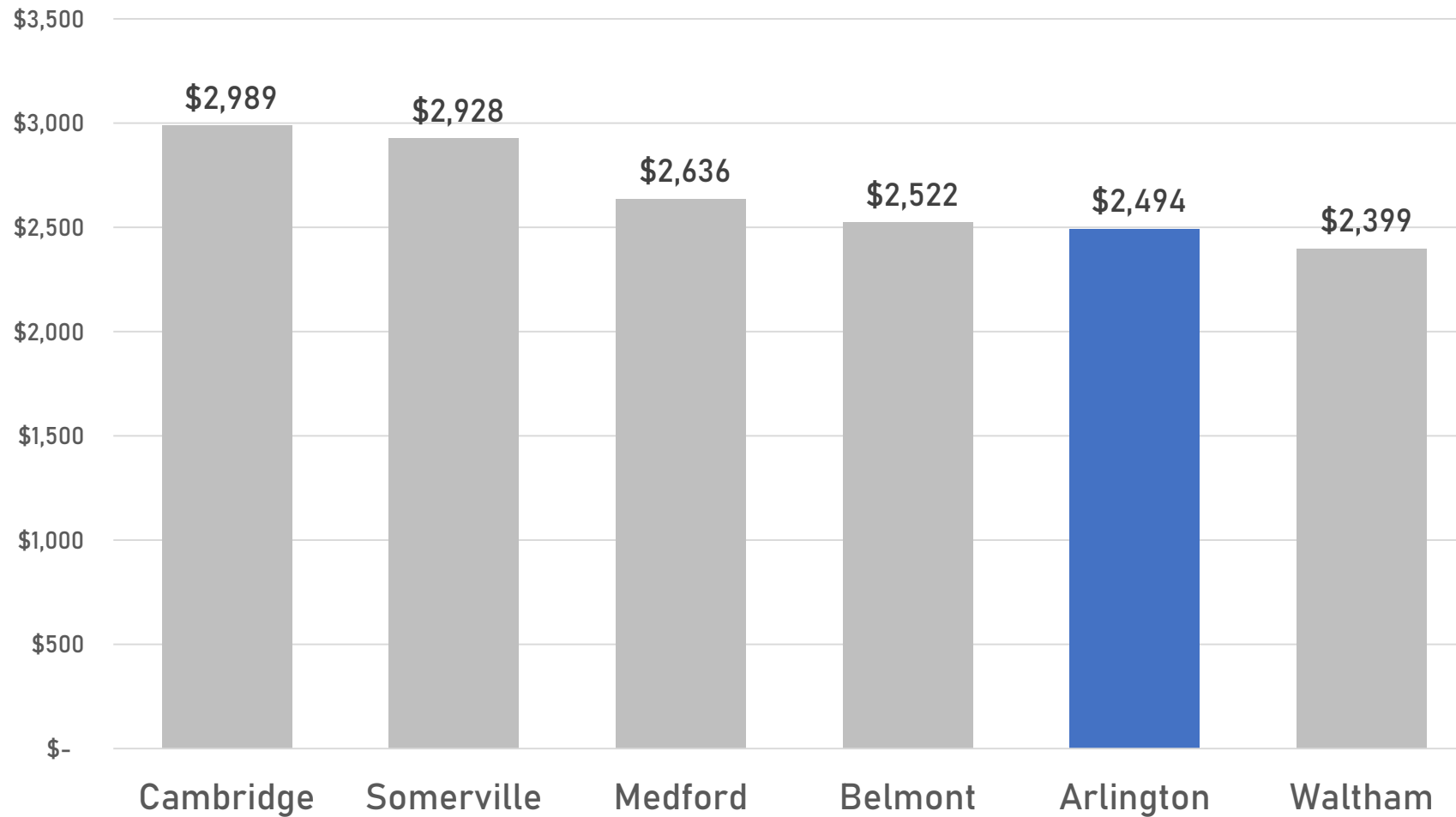


# Median Home Value Trend



Sources: Zillow Research Housing Value Index Time Series; RKG Associates.

## Median Monthly Rent, 2019





Retail/office  
for lease ranges from  
**\$19-\$31**  
per square foot per year



673-683 Mass Ave; 2200 sf retail for lease; asking \$19.10/sf/yr

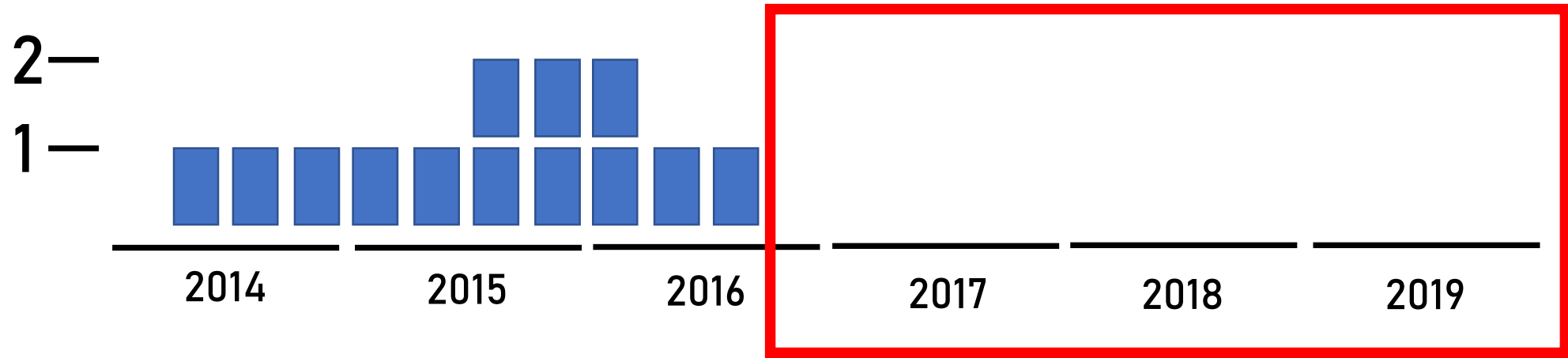


190-192 Mass Ave; 1700 sf retail for lease; asking \$30.00/sf/yr



5-11 Water Street; 1750 sf office for lease; asking rent not disclosed

## Arlington's For Sale Listings, Commercial Space



Zero marketed commercial listings  
in the last 13 quarters

Commercial vacancy rate is  
frequently below 2 percent

Sources: Costar Realty Information; Town of Arlington



# What kind of demand for commercial space could emerge in Arlington?

## Middlesex County Projected New Jobs, Present to 2029

*Selected job growth categories, 4-Digit NAICS*

	Jobs 2018	Net New Jobs by 2029	Space Required
Middlesex County Total	1,035,000	85,000	21,250,000 sf
Scientific Research & Development Serv.	49,800	19,000	4,750,000 sf
Management of Companies	33,000	10,000	2,000,000 sf
Colleges, Universities & Prof. Schools	66,700	8,900	1,790,000 sf
Management & Scientific Consulting Serv.	22,600	6,300	1,270,000 sf
Restaurants	53,300	5,400	940,000 sf
Computer Systems Design	44,200	3,700	735,000 sf

*Sources: EMSI Industry Table Projections; US Bureau of Labor Statistics; RKG Associates.*

Arlington today comprises

**1%**

Of Middlesex County jobs



"Fair Share"



Potential demand for  
**+/- 200,000 sf**  
of commercial space  
over 10 years

## Gauging the potential for Lab/Research & Development

### Tetragenetics “Arlington’s first biotech firm” Moved from Cambridge in 2015

- Upper management already lived in Arlington
- Larger space than could be afforded in Cambridge
- Concrete floors, garage doors for supporting large equipment
- Biotech by special permit in Arlington since 2012

*Sources: Mass Biotechnology Council; The Patriot Ledger*



Mass BioReady  
Bronze





## Key Takeaways

Arlington's relatively small job base mostly consists of lower-paying jobs held by residents of other communities.

Existing jobs in industrial zones are highly diverse, with most in sectors that pay above the town average salary.

Middlesex County's hot housing market is exerting pressure on industrial zones – especially those with aged structures.

Firms in legacy industrial sectors are struggling to financially justify Arlington rents.

Higher-tech industrial firms may see Arlington as a desirable, less-expensive option, although recruitment may be a challenge.







# Fiscal Impact Study



An aerial photograph of a city, likely New York City, showing a dense urban core with many skyscrapers in the distance. The foreground and middle ground show a mix of residential and commercial buildings, trees, and parking lots. A semi-transparent white box is overlaid on the image, containing the title and a list of bullet points.

# What is a fiscal impact model?

- Estimates the incremental local fiscal impacts of different types of development
- Can help users to understand the relationship between a community's land use decisions and their corresponding financial impacts

# Three central assumptions

Measures incremental impacts only

Local inflow/outflow impacts only

Excludes some irrelevant revenues & expenses



# Methodology

**2020  
Town  
Budget**

How much of each  
revenue & expense  
is driven by each  
land use type?

How much would  
incremental  
development  
actually affect each  
revenue & expense?

**Potential  
Impact**

# Methodology

How much of each revenue & expense is driven by each land use type?

## “Fair Share”

### Example line items

- Ambulance Fees
- Meals Tax Receipts
- General Government Expenses
- Fire & Police Departments
- Public Works

## All Commercial

### Example line items

- Food and Liquor Licenses

## All Residential

### Example line items

- Libraries
- Veterans' Services
- Marriage Certificates

	Total Assessed Value	% of Taxable
Residential	\$10,349,000,000	95%
Commercial	\$438,000,000	4%
All Other Taxable	\$78,000,000	1%
Tax-Exempt	\$773,000,000	-

Sources: FY 2019 Arlington Assessors' Database

## Residential-Heavy

### Example line items

- Healthcare & Pensions



# Methodology

How much would incremental development actually affect each revenue & expense?

Example line items	Incrementality
Motor Vehicle Excise Income	100%
Permits and Licenses	100%
Inspections	75%
Fire Department	75%
Trash Collection	30%
Street Lighting	20%
Parks and Recreation	20%
Public Works	20%
Town Government	20%

Standard Assumption

# Methodology

Two most influential line items:

Property Tax Income

Public School Spending

What will be the value of new construction? How does it compare to the values of Arlington's existing structures?

How many school-aged children will new development draw to Arlington?



# Methodology

How much education spending do different types of housing require?

Arlington contributes an incremental  
**\$7,297**  
per additional student to local schools

*Sources: Town Manager's Office*

## Student Generation Rate Examples

### Single-Family

3,522 students

8,519 units

**0.41**  
students per unit

### Multi-Family

2,071 students

10,113 units

**0.20**  
students per unit

### Apartments

1.89 persons  
Average household  
size



**0.19**  
students per unit

### Condominiums

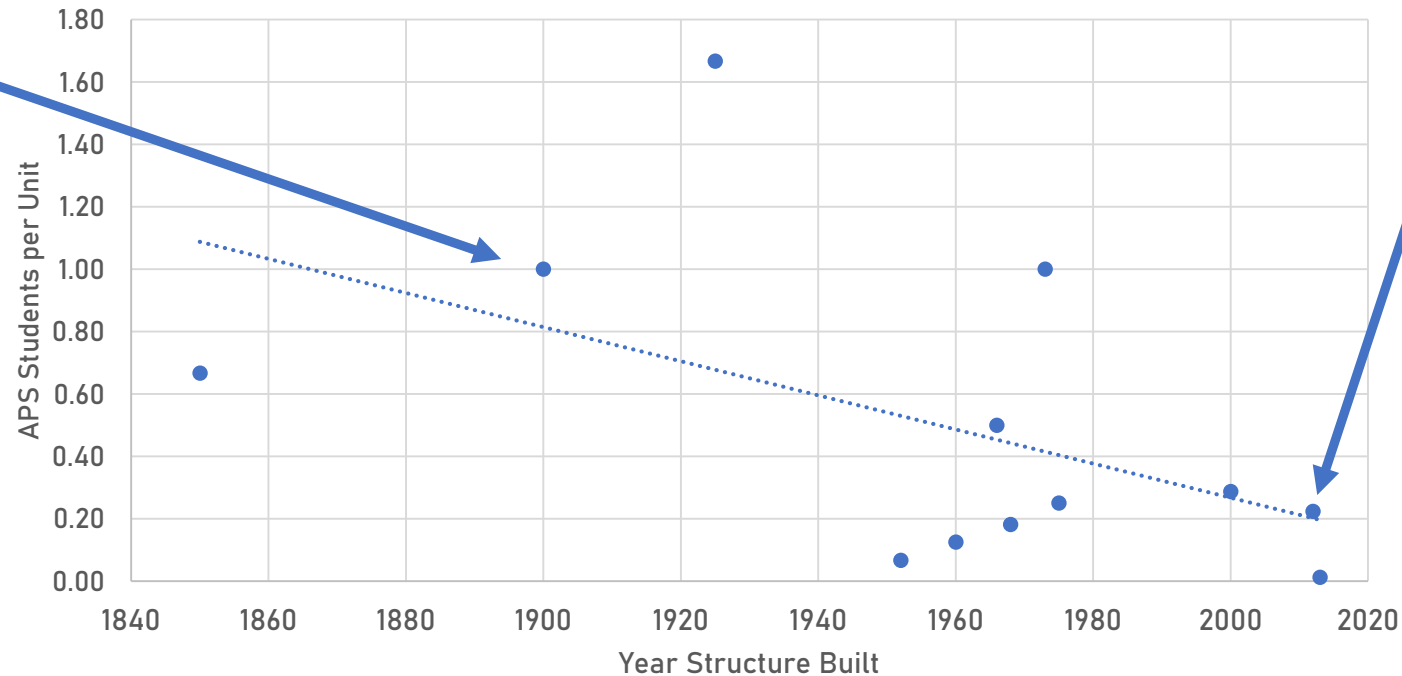
2.27 persons  
Average household  
size



**0.23**  
students per unit

## Apartments: Year Built vs. Students per Unit, 2018

Sample of 12 apartment buildings with multiple student residents



**47-49 Broadway**

6 units  
6 APS students  
1.00 students per unit



**30 Mill Street  
Brigham Square  
Apartments**

116 units  
26 APS students  
0.22 students per unit





# Methodology

What will be the value of new construction?

	Total Inventory	Built 2013 & After	New Construction Premium
Single-Family Homes	7,998	103	-
Assessed Value/Property	\$752,000	\$1,114,000	48%
Condominiums	3,726	91	-
Assessed Value/Property	\$465,000	\$838,000	80%
Apartments (Built SF)	13,782,000	196,000	-
Assessed Value/Built SF	\$181	\$408	125%

*Sources: Arlington Assessors' Database, RKG Associates*

## New Construction Value Premium Assumptions

Single-Family

**48%**

Condominiums

**80%**

Apartments

**58%**

With risk adjustment

# Methodology

How many residents live in the average unit of different housing types in Arlington?

## Average Residents per Unit

Single-Family

**2.85**

Condominiums

**2.27**

Apartments

**1.89**

*Source: US Census, American Community Surveys 5-Year Estimates, 2013-2017; RKG Associates*

# Key Takeaways (Draft)

## Residential

	Single-Family	Condominiums	Apartments
Marginal Revenue per Unit	\$13,090	\$9,870	\$9,910
Marginal Expenditure per Unit	(\$4,580)	(\$2,890)	(\$2,400)
Average Net Fiscal Impact per Unit	\$8,510	\$6,980	\$7,510

*Sources: FY 2019 Arlington Assessors' Database, RKG Associates*



# Key Takeaways (Draft)

## Residential

	Single-Family	Condominiums	Apartments
<b>Marginal Revenue per Unit</b>	<b>\$13,090</b>	<b>\$9,870</b>	<b>\$9,910</b>
Property Income Tax	\$12,540	\$9,430	\$9,540
Marginal Excise Tax	\$310	\$240	\$200
Marginal Fees, Fines, Permits, etc.	\$240	\$190	\$160
<b>Marginal Expenditure per Unit</b>	<b>(\$4,580)</b>	<b>(\$2,890)</b>	<b>(\$2,400)</b>
School Department	(\$3,020)	(\$1,640)	(\$1,370)
Fire Department	(\$220)	(\$170)	(\$140)
Police Department	(\$230)	(\$190)	(\$150)
Public Works	(\$80)	(\$60)	(\$50)
Healthcare & Pensions	(\$360)	(\$290)	(\$240)
All Other Marginal Expenditures	(\$670)	(\$540)	(\$450)
<b>Average Net Fiscal Impact per Unit</b>	<b>\$8,510</b>	<b>\$6,980</b>	<b>\$7,510</b>

Sources: FY 2019 Arlington Assessors' Database, RKG Associates

# Key Takeaways (Draft)

## Commercial

	Industrial, R&D, Flex Space	Retail	Office & Medical Space	All Other Commercial
Marginal Revenue per Sq Foot	\$1.86	\$2.60	\$2.28	\$2.11
Marginal Expenditure per Sq Foot	(\$0.19)	(\$0.27)	(\$0.24)	(\$0.22)
Average Net Fiscal Impact per Sq Foot	\$1.66	\$2.33	\$2.04	\$1.89

*Sources: FY 2019 Arlington Assessors' Database, RKG Associates*





Thank you